		ST DEPARTMENT DIVISION O	OF NA					FORI		
APPLIC	CATION FOR	PERMIT TO DRILL	L				1. WELL NAME and NUMBER  NBU 1022-1P			
2. TYPE OF WORK  DRILL NEW WELL (	REENTER P8	A WELL ( DEEPE	N WELI	L ((i)			3. FIELD OR WILDCAT NATURAL BUTTES			
4. TYPE OF WELL  Gas Well Coalbed Methane Well: NO						5. UNIT or COMMU	NITIZATION AGRE	EMENT NAME		
6. NAME OF OPERATOR		GAS ONSHORE, L.P.					7. OPERATOR PHON			
8. ADDRESS OF OPERATOR		enver, CO, 80217					9. OPERATOR E-MA		.com	
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		11. MINERAL OWNE			5	_	12. SURFACE OWN	RSHIP		
UTU-011336  13. NAME OF SURFACE OWNER (if box 12	= 'fee')	FEDERAL ( IND	OIAN (	) STATE (	<i></i>	FEE (	FEDERAL INI	DIAN ( STATE (	~ ~	
15. ADDRESS OF SURFACE OWNER (if box	-						16. SURFACE OWNE			
13. ADDRESS OF SORFACE OWNER (II DOX	12 - 166 )							-K L-MAIL (II DOX 1	12 - 1ee j	
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')		18. INTEND TO COM MULTIPLE FORMATI YES (Submit C	IONS	<b>LE PRODUCT</b> gling Applicati		NO 📵	19. SLANT  VERTICAL DIRECTIONAL HORIZONTAL			
20. LOCATION OF WELL	FO	OTAGES	Qī	TR-QTR	9	SECTION	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	310 F	SL 971 FEL		SESE		1	10.0 S	22.0 E	S	
Top of Uppermost Producing Zone	310 F	SL 971 FEL		SESE		1	1 10.0 S 22.0		S	
At Total Depth	310 FSL 971 FEL			SESE		1	10.0 S	22.0 E	S	
21. COUNTY UINTAH		22. DISTANCE TO N		T LEASE LIN						
		25. DISTANCE TO N (Applied For Drilling	g or Co		AME	POOL	26. PROPOSED DEPTH MD: 8400 TVD:			
27. ELEVATION - GROUND LEVEL		28. BOND NUMBER	WYBO	000291			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Water permit # 43-8496			
		A <sup>-</sup>	TTACH	HMENTS						
VERIFY THE FOLLOWING	ARE ATTACH	ED IN ACCORCAN	CE WI	ITH THE UT	ГАН (	OIL AND G	AS CONSERVATION	ON GENERAL RU	LES	
WELL PLAT OR MAP PREPARED BY	LICENSED SUR	VEYOR OR ENGINEE	R	<b>№</b> сом	PLET	E DRILLING	PLAN			
AFFIDAVIT OF STATUS OF SURFACE	OWNER AGRE	EMENT (IF FEE SURF	ACE)	FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER						
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY				торс	GRA	PHICAL MAI	•			
NAME Kevin McIntyre	TIT	<b>FLE</b> Regulatory Analyst	I			PHONE 72	0 929-6226			
SIGNATURE	DA	TE 09/03/2008				EMAIL Kev	vin.McIntyre@anadark	o.com		
<b>API NUMBER ASSIGNED</b> 43047500860000				Perm	) Cyllling it Manager					

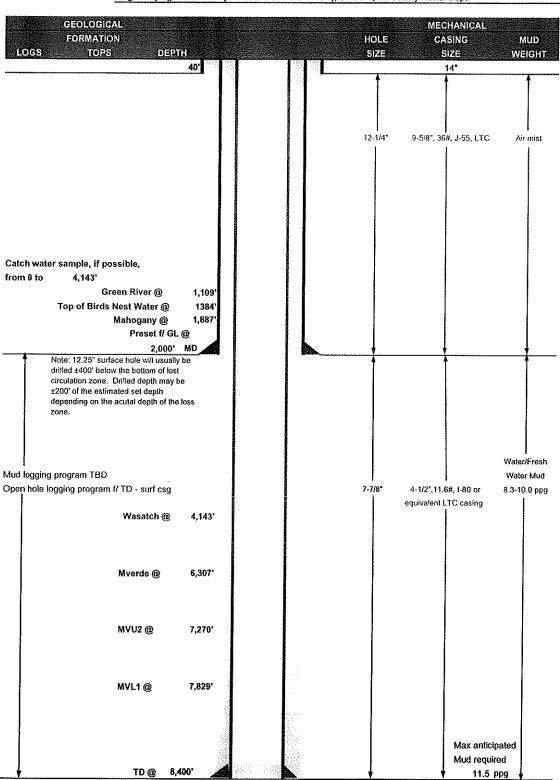
	Proposed Hole, Casing, and Cement						
String	Hole Size	<b>Casing Size</b>	Top (MD)	Bottom (MD)			
Surf	12.25	9.625	0	2000			
Pipe	Grade	Length	Weight				
	Grade J-55 LT&C	2000	36.0				
	Cement Interval	Top (MD)	Bottom (MD)				
		0	2000				
		<b>Cement Description</b>	Class	Sacks	Yield	Weight	
			Premium Foamed Cement	215	1.18	15.6	

	Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)			
Prod	7.875	4.5	0	8400			
Pipe	Grade	Length	Weight				
	Grade I-80 LT&C	8400	11.6				
	<b>Cement Interval</b>	Top (MD)	Bottom (MD)				
		0	8400				
		<b>Cement Description</b>	Class	Sacks	Yield	Weight	
			Premium Lite High Strength	400	3.38	11.0	
			Pozzuolanic Cement	1330	1.31	14.3	



# KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

KERR-McGEE OIL & GAS ONSHORE LP COMPANY NAME DATE August 22, 2008 **NBU 1022-1P** WELL NAME TD 8,400 MD/TVD FIELD **Natural Buttes COUNTY Uinlah** STATE Utah **ELEVATION** 5,150' GL KB 5,165' SURFACE LOCATION SESE 310' FSL & 971' FEL, SEC. 1, T10S, R22E BHL Straight Hole Latitude: 39.971550 Longitude: -109.381617 NAD 27 **OBJECTIVE ZONE(S)** Mesaverde Regulatory Agencies: Bi.M (MINERALS and SURFACE), UDOGM, Tri-County Health Dept. ADDITIONAL INFO



# KERR-McGEE OIL & GAS ONSHORE LP

#### DRILLING PROGRAM

#### CASING PROGRAM

							The state of the s	DESIGN FACT	ORS
	SIZE	INTERV	/AL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40	•						
						200	3520	2020	453000
SURFACE	9-5/8*	0 to	2000	36.00	J-55	LTC	1.11	2.16	8.01
	5.8.8.5.5						7780	6350	201000
PRODUCTION	4-1/2"	0 to	8400	11.60	1-80	LTC	2.45	1.26	2.36
	\$400 St. 600				e e entroini	5000 100		2.5 4.5	

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)
- 2) MASP (Prod Casing) = Pore Pressure at TD (.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD =

11.5 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing Buoy. Fact. of water)

MASP

3360 psi

#### CEMENT PROGRAM

					NOTE OF THE SECOND		
		गमाहाः	DESCRIPTION	SAGKS	EX(GESS)	WEIGHT	YIELD
SURFACE	LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1			+ .25 pps flocele				
TOP OUT C	ध्य (१)	200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
			+ 2% CaCl + .25 pps flocele			]	
TOP OUT O	MT (2 as n	equired	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE			NOTE: If well will circulate water to su	rface, opt	ion 2 will b	e utilized	****
Option 2	LEAD 1	1500	Prem cmt + 16% Gel + 10 pps gilsonite	170	35%	11.00	3.82
			+.25 pps Flocele + 3% sait BWOC	galvit tsa	14.14.1 S	at minute	1.495,600,60
	TAIL	500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
	W. S.		+ .25 pps flocele	avanjak			
TOP OU	CMT as re	equired	Premium cmt + 2% CaCl	as req.		15.60	1.18
	.7957			Table 1	A HATE	100	그 학교학 대
PRODUCTION	EAD 3,	,640'	Premium Lite II + 3% KCI + 0.25 pps	400	60%	11.00	3.38
	484		celloflake + 5 pps gilsonite + 10% gel				
	J	.	+ 0.5% extender				
	1000				a ti li 🖂		N MARKAN
	TAIL 4,	760	50/50 Poz/G + 10% salt + 2% gel	1330	60%	14.30	1.31
	4.4		+.1% R-3				

<sup>\*</sup>Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

#### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.				
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.				

#### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper & tower kelly valves.

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:	Brad Laney		DATE:
DRILLING SUPERINTENDENT:	•		DATE:
	Randy Bayne	NBU 1022-1P.xls	

<sup>\*</sup>Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

# NBU 1022-1P SESE Sec. 1, T10S,R22E UINTAH COUNTY, UTAH UTU-011336

# ONSHORE ORDER NO. 1

# DRILLING PROGRAM

# 1. <u>Estimated Tops of Important Geologic Markers:</u>

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	1109'
Bird's Nest	1384'
Mahogany	1887'
Wasatch	4143'
Mesaverde	6307'
MVU2	7270'
MVL1	7829'
TD	8400°

# 2. <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:</u>

Substance	<b>Formation</b>	<u>Depth</u>
	Green River	1109'
	Bird's Nest	1384'
	Mahogany	1887'
Gas	Wasatch	4143'
Gas	Mesaverde	6307'
Gas	MVU2	7270'
Gas	MVL1	7829'
Water	N/A	
Other Minerals	N/A	

# 3. Pressure Control Equipment (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

# 4. Proposed Casing & Cementing Program:

Please see the Natural Buttes Unit SOP.

# 5. <u>Drilling Fluids Program:</u>

Please see the Natural Buttes Unit SOP.

# 6. <u>Evaluation Program</u>:

Please see the Natural Buttes Unit SOP.

#### 7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 8400' TD, approximately equals 5208 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3360 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

# 8. <u>Anticipated Starting Dates:</u>

Drilling is planned to commence immediately upon approval of this application.

#### 9. Variances:

Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

#### Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest,

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped

and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

#### Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

#### Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling

NBU 1022-1P

operation does not encounter productive formations.

Conclusion

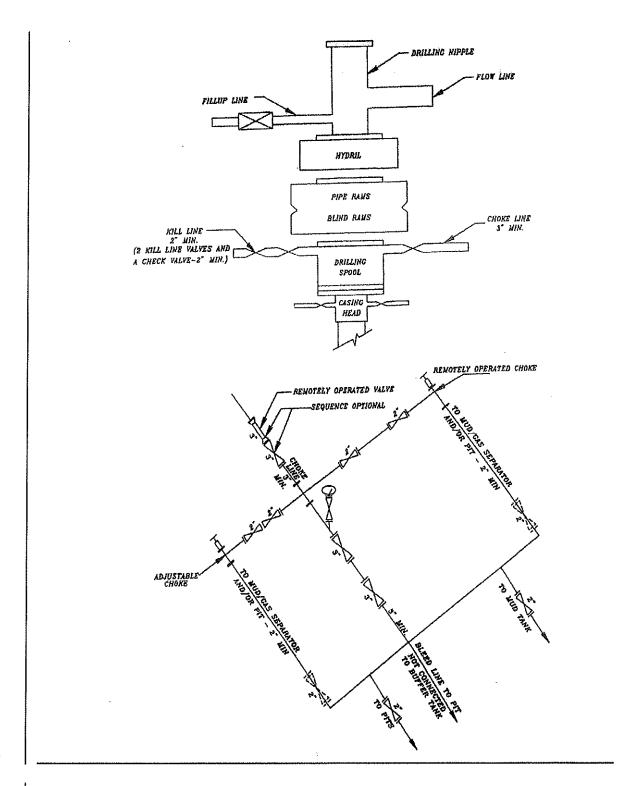
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

# 10. Other Information:

Please see Natural Buttes Unit SOP.

NBU 1022-1P

# **EXHIBIT A**



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

# NBU 1022-1P SESE Sec. 1,T10S,R22E UINTAH COUNTY, UTAH UTU-011336

### ONSHORE ORDER NO. 1

#### MULTI-POINT SURFACE USE & OPERATIONS PLAN

# 1. Existing Roads:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

#### 2. Planned Access Roads:

Approximately 0.2 mi. +/- of new access road is proposed. Refer to Topo Map B.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

# 3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

#### 4. <u>Location of Existing & Proposed Facilities:</u>

Please see the Natural Buttes Unit SOP.

Refer to Topo Map D for the location of the proposed pipelines.

A 1,080' rights-of-way will be required. Approximately 1,080' of 4" steel pipeline is proposed from the location to the tie-in point in Section 1, T10S, R22E. Please refer to the Topo Map D. The pipeline will be constructed utilizing existing rights were possible and pulled into place using a rubber tired tractor. The pipeline will be butt-welded together.

# Variances to Best Management Practices (BMPs) Requested:

Approximately 1,080' of 4" steel pipeline will be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

#### 5. Location and Type of Water Supply:

Please see the Natural Buttes SOP.

#### 6. Source of Construction Materials:

Please see the Natural Buttes SOP.

# 7. <u>Methods of Handling Waste Materials</u>:

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of **20 mil thick and felt**, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (Request is in lieu of filing Form 3160-5, after initial production).

#### 8. Ancillary Facilities:

Please see the Natural Buttes SOP.

# 9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

# 10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

upon reclamation of the pit the following seed mixture will be used. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for *drilled* seed are:

Galleta Grass 8 lbs.
Black Sagebrush 8 lbs.
Needle and Thread Grass 4 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

# 11. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

# 12. Stipulations/Notices/Mitigation:

A Cactus Survey will be conducted and submitted, per the onsite agreement.

# 13. Other Information:

A Class III archaeological survey and a paleontological survey have been performed and will be submitted.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

# NBU 1022-1P

# 13. Lessee's or Operator's Representative & Certification:

Kevin McIntyre Regulatory Analyst I Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-3779 (720) 929-6226 Randy Bayne
Drilling Manager
Kerr-McGee Oil & Gas Onshore LP
1368 South 1200 East
Vernal, UT 84078
(435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond #WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre 8/22/2008

Date

# Kerr-McGee Oil & Gas Onshore LP

NBU #1022-1P

LOCATED IN UINTAH COUNTY, UTAH SECTION 1, T10S, R22E, S.L.B.&M.

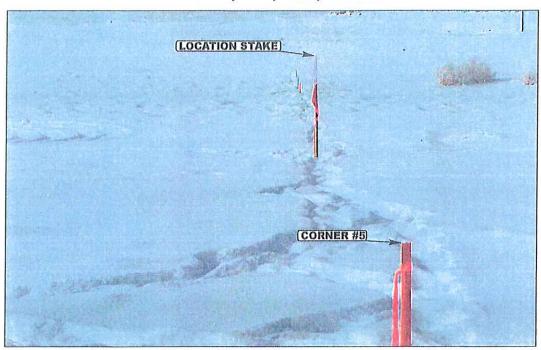


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY

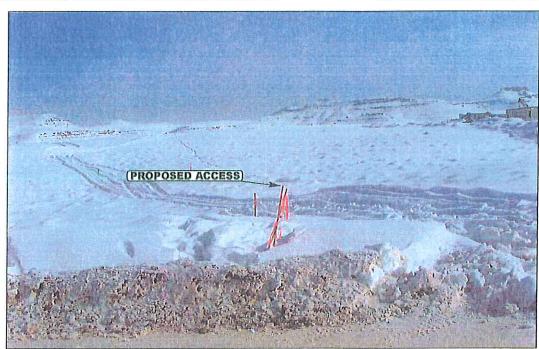


PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: EASTERLY

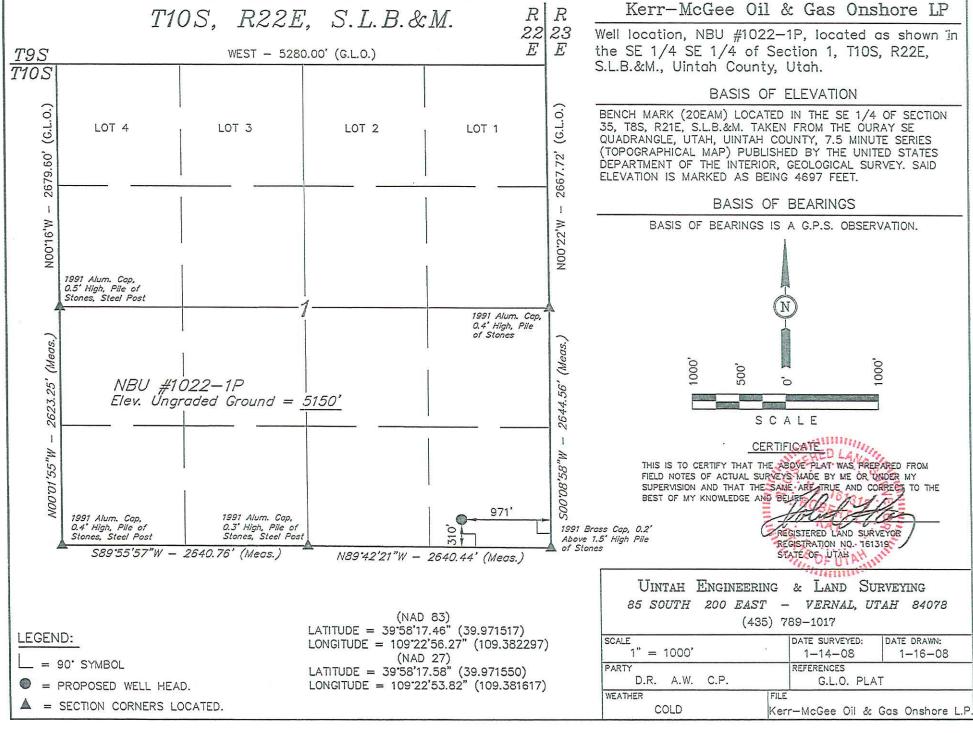


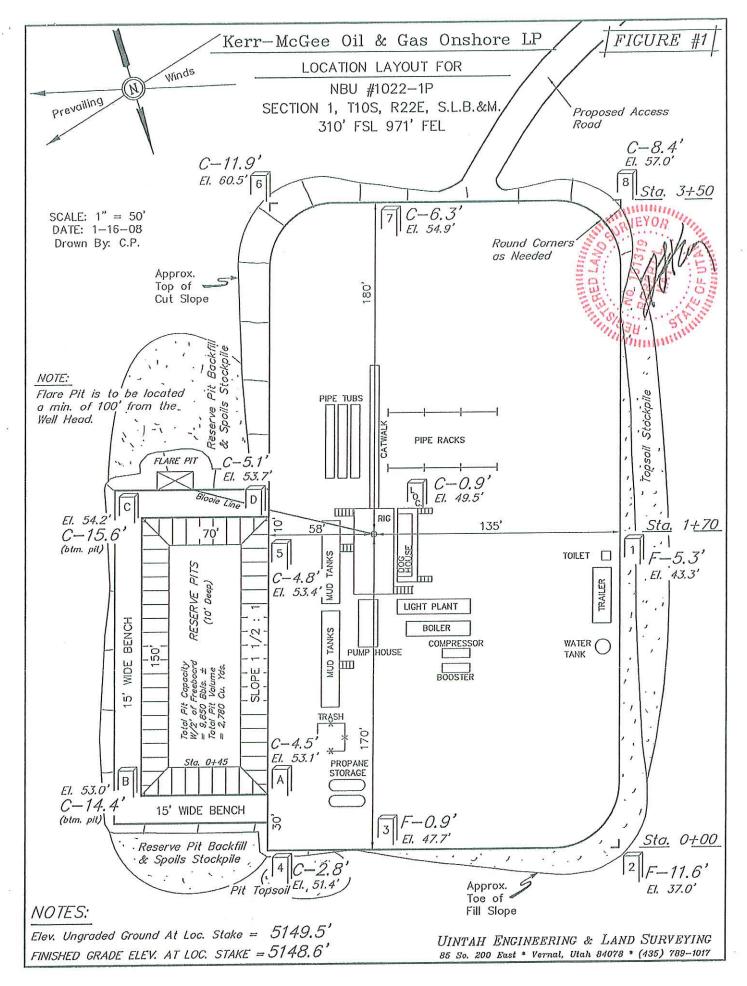
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

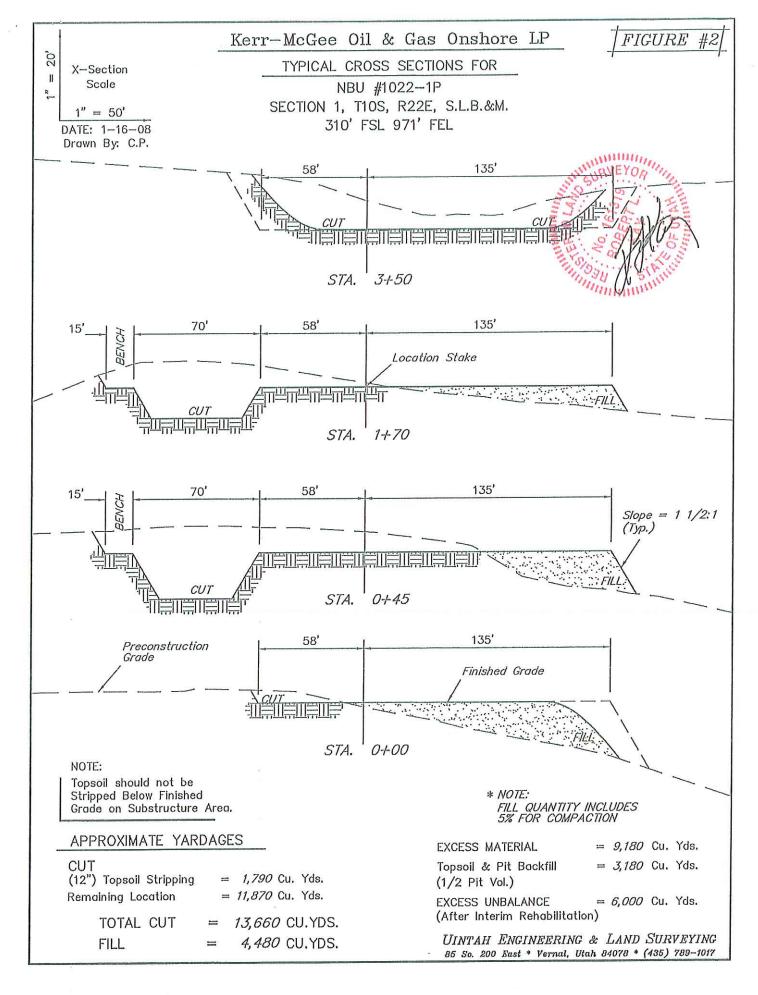
LOCATION PHOTOS

**РНОТО** 

TAKEN BY: D.R. | DRAWN BY: Z.L. | REVISED: 00-00-00







# Kerr-McGee Oil & Gas Onshore LP NBU #1022-1P PIPELINE ALIGNMENT LOCATED IN UINTAH COUNTY, UTAH

SECTION 1, T10S, R22E, S.L.B.&M.

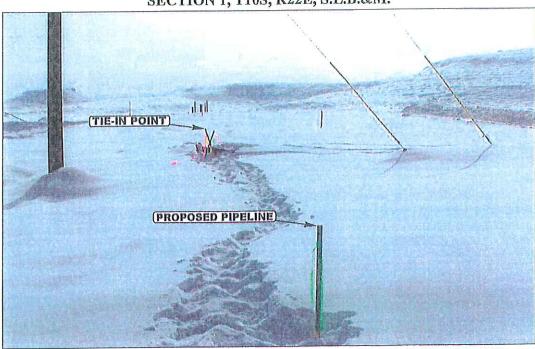


PHOTO: VIEW FROM TIE-IN POINT

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW OF PIPELINE AT LOCATION

CAMERA ANGLE: SOUTHWESTERLY



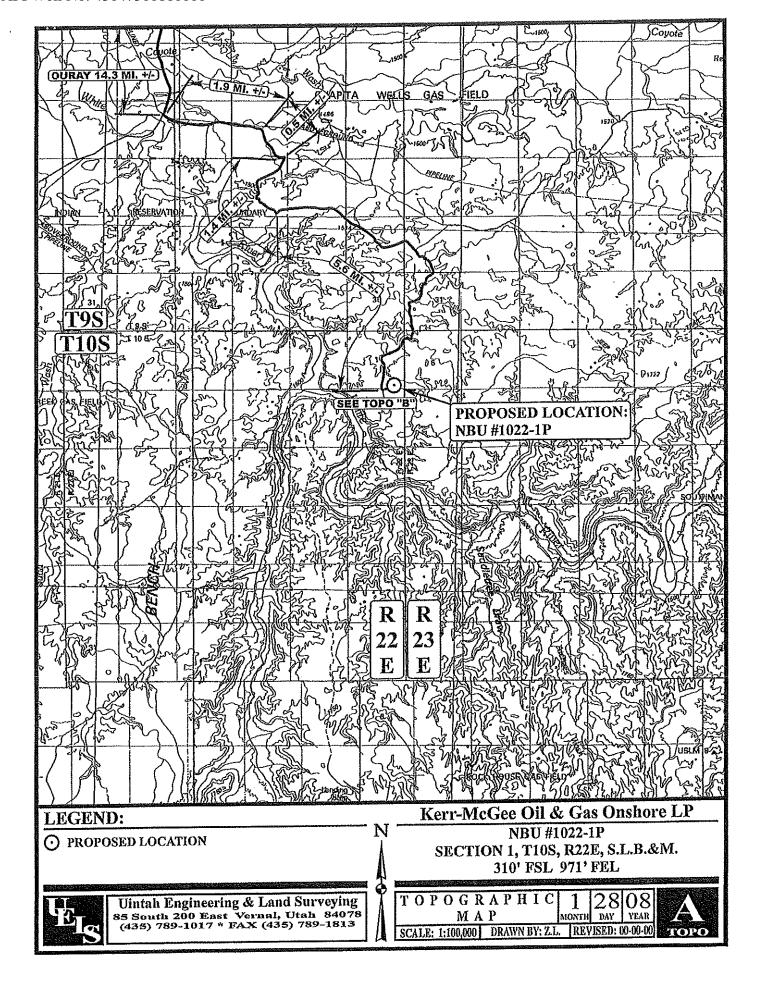
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

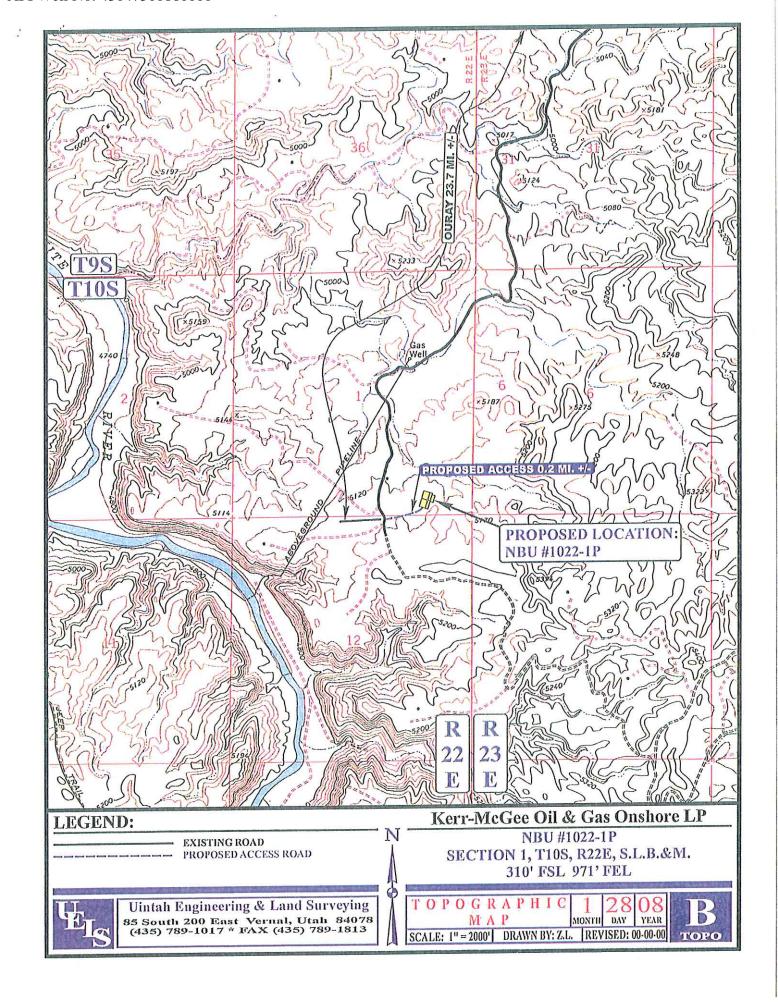
PIPELINE PHOTOS

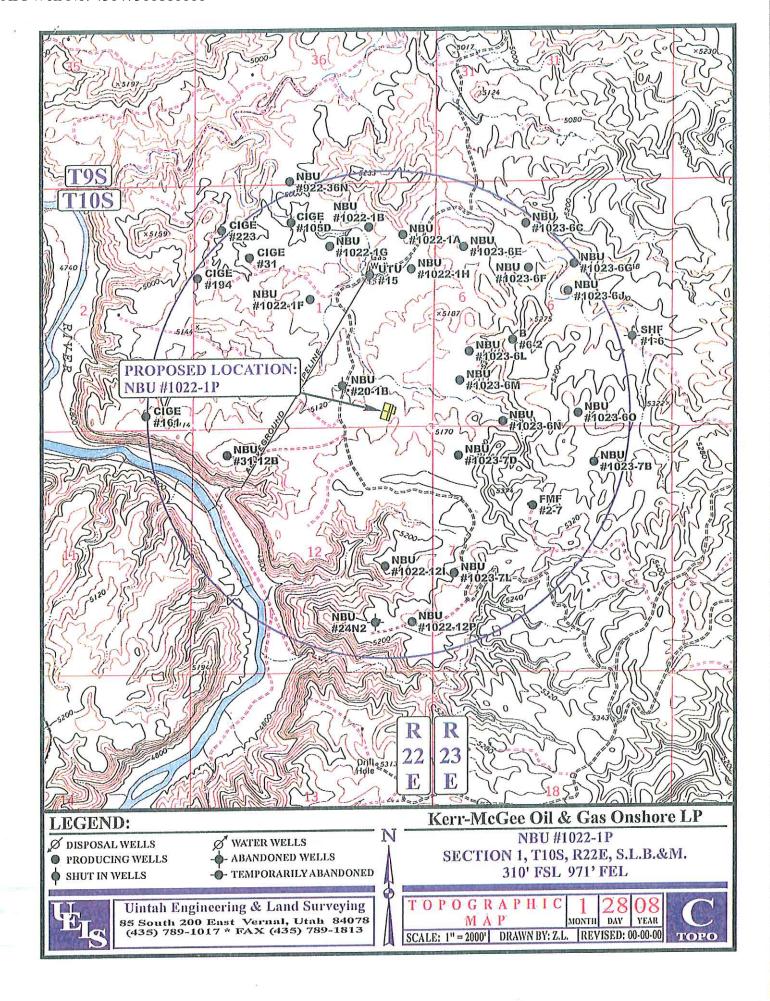
YEAR MONTH DAY

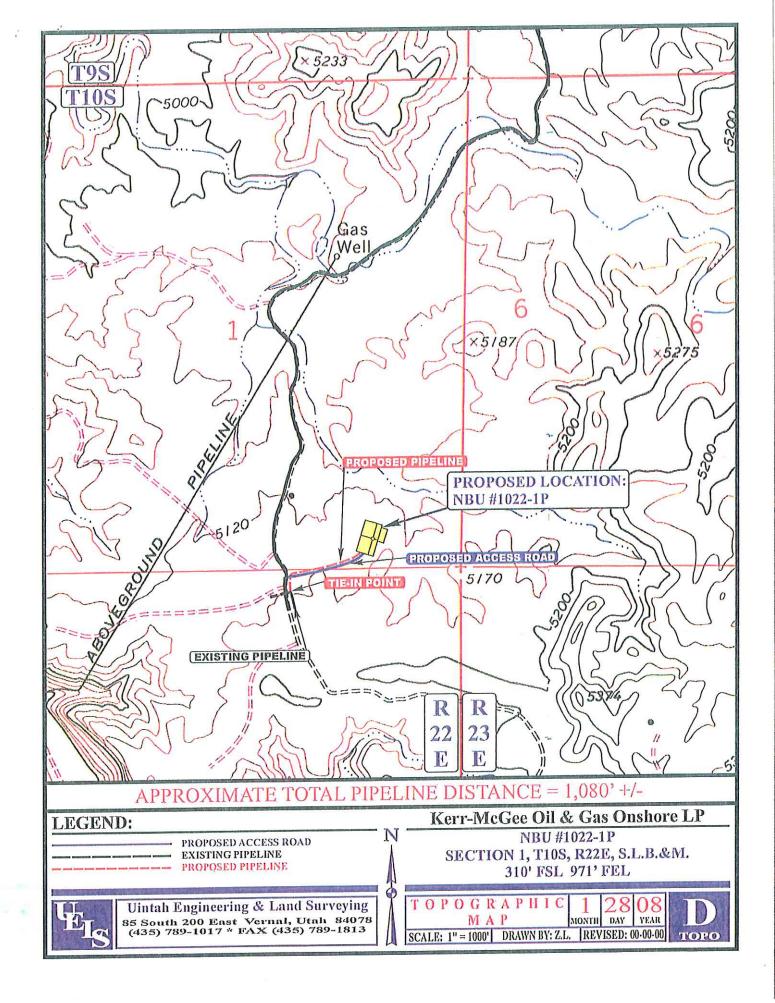
**РНОТО** 

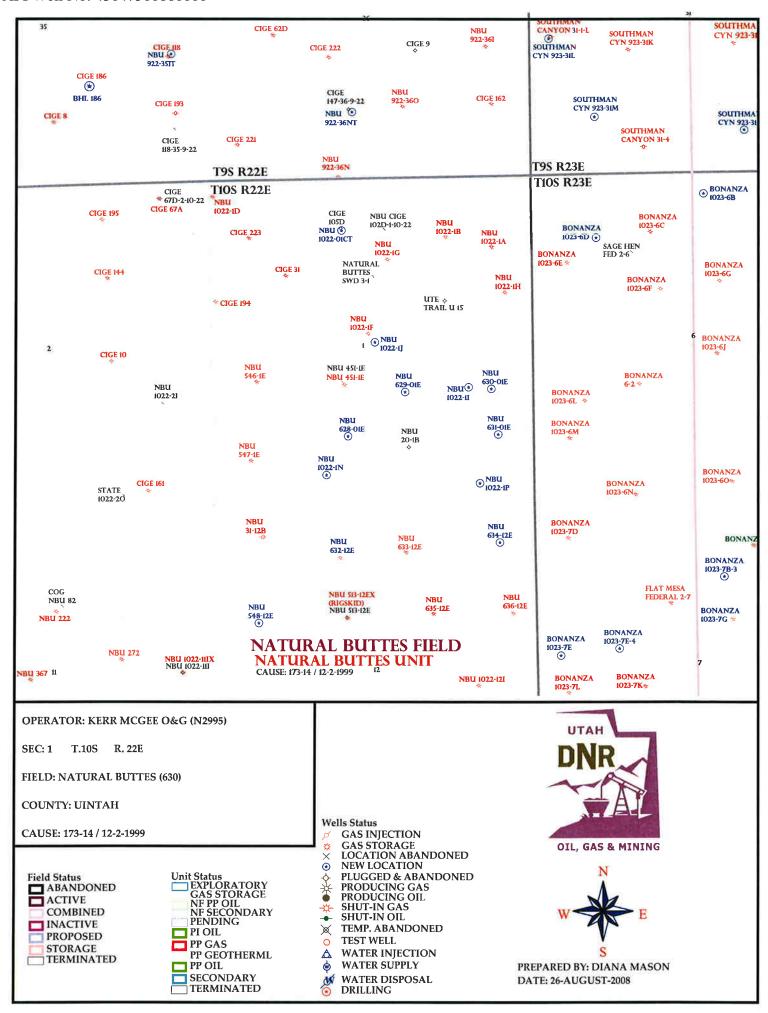
TAKEN BY: D.R. | DRAWN BY: Z.L. | REVISED: 00-00-00











# **United States Department of the Interior**

# **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

September 2, 2008

Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Natural Buttes Unit

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Natural Buttes Unit, Uintah County, Utah.

API # WELL NAME LOCATION

(Proposed PZ Wasatch/MesaVerde)

43-047-50098 NBU 1022-27A Sec 27 T10S R22E 1058 FNL 0413 FEL 43-047-50095 NBU 1022-34E Sec 34 T10S R22E 1687 FNL 1113 FWL 43-047-50094 NBU 1022-35M Sec 35 T10S R22E 0683 FSL 1058 FWL 43-047-50093 NBU 1022-34F Sec 34 T10S R22E 1632 FNL 2266 FWL 43-047-50080 NBU 922-33ET Sec 33 T09S R22E 2446 FNL 0673 FWL 43-047-50084 NBU 1022-22N Sec 22 T10S R22E 0515 FSL 2467 FWL 43-047-50086 NBU 1022-1P Sec 01 T10S R22E 0310 FSL 0971 FEL

This office has no objection to permitting the wells at this time.

/s/ Michael L. Coulthard

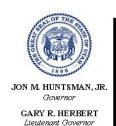
bcc: File - Natural Buttes Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron

Fluid Chron

MCoulthard:mc:9-2-08

# WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	8/22/2008	<b>API NO. ASSIGNED:</b> 43047500860000
	NBU 1022-1P	
	: KERR-MCGEE OIL & GAS ONSHOR	E, L.P. (N2995) <b>PHONE NUMBER:</b> 720 929-6226
CONTACT:	: Kevin McIntyre	
PROPOSED LOCATION:	SESE 1 100S 220E	Permit Tech Review:
SURFACE:	: 0310 FSL 0971 FEL	Engineering Review:
воттом:	: 0310 FSL 0971 FEL	Geology Review: 📝
COUNTY:	UINTAH	
LATITUDE:	39.97159	<b>LONGITUDE:</b> -109.38173
UTM SURF EASTINGS:	638199.00	<b>NORTHINGS:</b> 4425648.00
FIELD NAME:	NATURAL BUTTES	
LEASE TYPE:	1 - Federal	
LEASE NUMBER:	UTU-011336	PROPOSED FORMATION: MVRD
SURFACE OWNER:	1 - Federal	COALBED METHANE: NO
RECEIVED AND/OR REVI	EWED:	LOCATION AND SITING:
<b></b> PLAT		R649-2-3.
<b>▶ Bond:</b> FEDERAL - WYE	B000291	Unit: NATURAL BUTTES
Potash		R649-3-2. General
☑ Oil Shale 190-5		
Oil Shale 190-3		R649-3-3. Exception
Oil Shale 190-13		✓ Drilling Unit
<b>✓ Water Permit:</b> Water	<sup>-</sup> permit # 43-8496	Board Cause No: 173-14
RDCC Review:		Effective Date: 12/22/1999
Fee Surface Agreem	ent	Siting: 460' fr u bdry & uncomm. tract
Intent to Commingle	e	R649-3-11. Directional Drill
Comments: Presite 0	Completed	
Stipulations: 4 - Fed 17 - Oil	deral Approval - dmason I Shale 190-5(b) - dmason	



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

# **Permit To Drill**

\*\*\*\*\*\*

Well Name: NBU 1022-1P API Well Number: 43047500860000 Lease Number: UTU-011336

**Surface Owner:** FEDERAL **Approval Date:** 9/11/2008

#### **Issued to:**

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of CAUSE: 173-14.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with the Order in Cause No. 190-5(b) dated October 28, 1982, the operator shall comply with the requirements of Rules R649-3-31 and R649-3-27 pertaining to Designated Oil Shale Areas. Additionally, the operators shall ensure that the surface and or production casing is properly cemented over the entire oil shale section as defined by Rule R649-3-31. The Operator shall report the actual depth the oil shale is encountered to the division.

#### **Notification Requirements:**

Notify the Division with 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

# **Reporting Requirements:**

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

**Approved By:** 

Gil Hunt

Associate Director, Oil & Gas

Til Hut

	STATE OF UTAH		FORM 9
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MININ	NG	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-011336
SUND	RY NOTICES AND REPORTS O	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	sals to drill new wells, significantly deepen ex ugged wells, or to drill horizontal laterals. Use	isting wells below current APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: NBU 1022-1P	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047500860000
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	Street, Suite 600, Denver, CO, 80217 3779	<b>PHONE NUMBER:</b> 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0310 FSL 0971 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
,	☐ ACIDIZE ☐	ALTER CASING	CASING REPAIR
Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
8/30/2009	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	■ NEW CONSTRUCTION
Date of Work Completion.	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	☐ TUBING REPAIR ☐	VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	✓ APD EXTENSION
Report Date.	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:
Kerr-McGee Oil & G extension to this A	DMPLETED OPERATIONS. Clearly show all pertine as Onshore, L.P. (Kerr-McGee) r PD for the maximum time allow with any questions and/or comm	espectfully requests an ed. Please contact the nents. Thank you.	Approved by the Utah Division of Oil, Gas and Mining  ate: August 27, 2009  y:
NAME (PLEASE PRINT) Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	TITLE Regulatory Analyst	
SIGNATURE	\50 352-0130	DATE	
N/A		8/26/2009	



# The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

# Request for Permit Extension Validation Well Number 43047500860000

**API:** 43047500860000 **Well Name:** NBU 1022-1P

Location: 0310 FSL 0971 FEL QTR SESE SEC 1 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date Original Permit Issued:** 9/15/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

<ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes No</li> </ul>
• Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?   Yes  No
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? Yes</li> <li>No</li> </ul>
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   Yes   No Utah Division of Oil, Gas and Mining

**Signature:** Danielle Piernot **Date:** 8/26/2009

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHOR Augus

Bv:

# United States Department of the Interior



#### **BUREAU OF LAND MANAGEMENT**

Green River District-Vernal Field Office 170 South 500 East Vernal, UT 84078 (435) 781-4400 Fax: (435) 781-4410 http://www.blm.gov/ut/st/en/fo/vernal.html



IN REPLY REFER TO: 3160 UTG011

43.047.50086

April 23, 2010

Kathy Schneebeck Dulnoan Kerr McGee Oil & Gas Onshore LP PO Box 173779 Denver, CO 80217-3779

Re:

Request to Return APD Well No. NBU 1022-1P SESE, Sec. 1, T10S, R22E Uintah County, Utah Lease No. UTU-011336 Natural Buttes Unit

# Dear Kathy:

The Application for Permit to Drill (APD) for the above referenced well received in this office on August 25, 2008, is being returned unapproved per your request to this office in an email message to Natural Resource Specialist Dave Gordon received on April 12, 2010. If you intend to drill at this location at a future date, a new APD must be submitted.

If you have any questions regarding APD processing, please contact me at (435) 781-4455.

Sincerely,

Circly Swerson

Cindy Severson Land Law Examiner

CC:

**UDOGM** 

RECEIVED
MAY 1 9 2010

DIV. OF OIL, GAS & MINING

	STATE OF UTAH		FORM 9				
	5.LEASE DESIGNATION AND SERIAL NUMBER:						
	UTU-011336						
SUND	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:						
Do not use this form for proposition hole depth, reenter plu DRILL form for such proposals.	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES						
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: NBU 1022-1P						
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	<b>9. API NUMBER:</b> 43047500860000						
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th S	9. FIELD and POOL or WILDCAT: NATURAL BUTTES						
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0310 FSL 0971 FEL	COUNTY: UINTAH						
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SESE Section: 01	STATE: UTAH						
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA							
TYPE OF SUBMISSION	TYPE OF ACTION						
	☐ ACIDIZE ☐	ALTER CASING	CASING REPAIR				
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME				
9/15/2010	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE				
SUBSEQUENT REPORT	☐ DEEPEN ☐	FRACTURE TREAT	☐ NEW CONSTRUCTION				
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK				
	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION				
SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION ☐	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON				
	☐ TUBING REPAIR	VENT OR FLARE	☐ WATER DISPOSAL				
☐ DRILLING REPORT	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION				
Report Date:	☐ WILDCAT WELL DETERMINATION ☐	OTHER	OTHER:				
12. DESCRIBE PROPOSED OR CO	MPLETED OPERATIONS. Clearly show all pertin	ent details including dates, denths, v	olumes, etc.				
Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.  Approved by the Utah Division of Oil, Gas and Mining							
Date: September 20, 2010							
By: bally							
			20				
NAME (PLEASE PRINT) Danielle Piernot	<b>PHONE NUMBER</b> 720 929-6156	TITLE Regulatory Analyst					
SIGNATURE	, 20 , 25 , 0130	DATE					
N/A		9/15/2010					



# The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

# Request for Permit Extension Validation Well Number 43047500860000

**API:** 43047500860000 Well Name: NBU 1022-1P

Location: 0310 FSL 0971 FEL QTR SESE SEC 01 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

**Date Original Permit Issued:** 9/15/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

u C . C V	ololli i ollollilig is a	Circumst or st	onic items related to ti	ic application, w	iicii siioala se vei iiicai
		i, has the own lo	ership changed, if so, l	nas the surface a	greement been
	any wells been dril requirements for t		nity of the proposed we	ell which would a	ffect the spacing or
	nere been any unit of proposed well?			t could affect the	permitting or operation
	there been any cha the proposed locat		cess route including ov	wnership, or righ	tof- way, which could
• Has th	ne approved source	of water for d	Irilling changed? 🔘 🕚	Yes 📵 No	
			to the surface location sed at the onsite evalua		<del>_</del>
• Is bor	nding still in place,	which covers t	this proposed well? 📵	Yes 🔵 No U	pproved by the tah Division of , Gas and Mining
nature:	Danielle Piernot	Date:	9/15/2010		
Title:	Regulatory Analyst I		KERR-MCGEE OIL & GAS	ONSHOR <b>Pate</b> :	September 20, 2010
_	<b>5</b> , , ,			, \	LND

Sig



# State of Utah

# DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

November 18, 2011

Kerr-McGee Oil & Gas Onshore, L.P. P.O. Box 173779. Denver, CO 80217

Re:

APD Rescinded - NBU 1022-1P, Sec. 1, T.10S, R. 22E

Uintah County, Utah API No. 43-047-50086

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on September 15, 2008. On August 27, 2009 and September 20, 2010 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective November 18, 2011.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason

Environmental Scientist

cc:

Well File

Bureau of Land Management, Vernal

